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10/502,528	01/04/2005	Benedikt Aschermann	P14957-US1	7480
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ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			EXAMINER NGUYEN, HAI V	
			ART UNIT	PAPER NUMBER
			2618	
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			07/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/502,528

Applicant(s)

ASCHERMANN, BENEDIKT

Examiner

HAI V. NGUYEN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to the communication received on 09 May 2008.
2. Claims 1-12 are presented for examination.

Response to Arguments

3. Applicant's arguments filed on 09 May 2008 have been fully considered but they are not persuasive. Upon further consideration, a new ground(s) of rejection is made in view of Cole et al. US 2002/0075906 A1, Mani et al. US 2002/0191565 A1, necessitated by Applicant's substantial amendment (*i.e.*, *a) dividing the network of antennas into a first network and a second network comprising a first main transmission path part and a second main transmission path of the main transmission path respectively, an intermediate coupling device being coupled to the first and second main transmission path parts*) to the independent claim 1 which significantly affected the scope thereof.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by **Cole et al. US2002/0075906 A1**.

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6. As to claim 1, Cole discloses substantially the invention as in claimed, including a method for coupling each of one or more peripheral devices (*Fig. 7, elements 702, 704, 708, 710, 712, 716*) to a network of distributed antennas (*Fig. 7, antenna network system ring element 410 of cells 512, 514, 516*), each peripheral device being suitable for transmission of one or more carrier signals (*Fig. 7, rf signals, [0106]*), which each occupy a different radio frequency band (*Fig. 7, [0106], [0109]*), the network of antennas comprising a main transmission path by cable (*Fig. 7, the input/output Fibre Optic cable line 738*), in which the carrier signals are coupled into and out of the main transmission path from and to the peripheral devices respectively, comprising the steps of:

a) dividing the network of antennas into a first network and a second network comprising a first main transmission path part (*Fig. 7, branch OCh1 element 730*) and a second main transmission path part (*Fig. 7, branch OCh2 element 732 or branch OCh3 element 734*) of the main transmission path respectively, an intermediate coupling device (*Fig. 7, MUX/DEMUX element 736 or COMBINER?SPLITTER elements 708 or 714*) being coupled to the first and second main transmission path parts; and at a location (*Fig. 7, element 736 or 708, or 714*) between the first and second main transmission path parts:

b) splitting the first main transmission path part into a first group of intermediate transmission paths for transmission of different carrier signals over different

intermediate transmission paths of the first group (*Fig. 7, first group element 502*);

c) splitting the second main transmission path part into a second group of intermediate transmission paths for transmission of different carrier signals over different

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intermediate transmission paths of the second group (*Fig. 7, first group element 504 or 506*); and

d) connecting an intermediate path of the second group to an intermediate path of the first group or to a further peripheral device (*Fig. 7*).

7. As to claim 2, Cole discloses, wherein an intermediate path of the first group of intermediate paths is connected to an intermediate path of the second group of intermediate paths (*Fig. 7*).

8. As to claim 3, Cole discloses, wherein an input of the intermediate coupling device for connection to the further peripheral device (*Fig. 7, element 716*) is connected to an intermediate path of the second group of intermediate paths (*Fig. 7, group element 504*).

9. Claim 4 corresponds to the system claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

10. Claims 5-6 have similar limitations of claims 2-3; therefore, they are rejected under the same rationale as in claims 2-3.

11. As to claim 7, Cole discloses wherein the intermediate paths of the first and second groups of intermediate paths and the further peripheral device are connected to each other by remote controllable electronic switches (*Fig. 7, elements 744, and the RF-Optical converters elements 724, 726, 728*).

12. As to claim 8, Cole discloses, wherein remote control of the electronic switches is exercised by control functionality of a peripheral device (*Fig. 6, element 608; Fig. 7,*

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element 708 or 714 or 744) which is associated with the switch (Fig. 7, elements 744, and the RF-Optical converters elements 724, 726, 728).

13. As to claim 9, Cole discloses, wherein a first port of circulator is connected to a first intermediate path, a second port is connected to a short circuit or to a further peripheral device, and a third port of the circulator is connected to a second intermediate path *(Figs. 7, 8, the rf duplexer 816 comprising a circulator may be of a conventional type which is coupled receiver/transmit antenna (or antennas array) 818, which again may be selected from conventional antenna types suitable for 2G/2.5G/3G cellular communication networks, [0124]).*

14. As to claim 10, Cole discloses, wherein with a further peripheral device connected to the second port of circulator the further peripheral device provides a matched load to said second port *(Figs. 7, 8, the rf duplexer 816 comprising a circulator may be of a conventional type which is coupled receiver/transmit antenna (or antennas array) 818, which again may be selected from conventional antenna types suitable for 2G/2.5G/3G cellular communication networks, [0124]).*

15. As to claim 11, Cole discloses, wherein with a further peripheral device connected to the second port of circulator the further peripheral device is connected to said second port through an isolator which provides a matched load to said second port *(Figs. 7, 8, the rf duplexer 816 comprising a circulator may be of a conventional type which is coupled receiver/transmit antenna (or antennas array) 818, which again may be selected from conventional antenna types suitable for 2G/2.5G/3G cellular communication networks, [0124]).*

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16. As to claim 12, Cole discloses, wherein the isolator is a further circulator of which an intermediate or second port is terminated by a matched load (*Figs. 7, 8, the rf duplexer 816 comprising a circulator may be of a conventional type which is coupled receiver/transmit antenna (or antennas array) 818, which again may be selected from conventional antenna types suitable for 2G/2.5G/3G cellular communication networks, [0124]*)).

17. Further references of interest are cited on Form PTO-892, which is an attachment to this action.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAI V. NGUYEN whose telephone number is (571)272-3901. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hai V. Nguyen/
Examiner, Art Unit 2618

/Matthew D. Anderson/
Supervisory Patent Examiner, Art Unit 2618